

3.0 Circulation Element

The Circulation Element of the Goodyear General Plan 2003-2013 supports the Land Use Element in providing transportation and transit system mobility and access. The Circulation Element shows the existing and proposed locations as well as capacities of vehicular roadways and bridges, transit systems and non-motorized networks which are designed to serve the needs of residents, employees, and visitors of the City. Even though the unincorporated portion of the planning area is administered by Maricopa County, it is important that this element be included in identifying regional facility improvements that will have a positive impact on the future City circulation system.

The Circulation Element communicates the City's desire for a multi-modal transportation system and is organized into the following five sections:

- Background
- Circulation Goals, Objectives, and Policies
- Circulation Plan
- Non-Motorized Circulation
- Circulation Element Implementation Activities

3.1 Background

The Circulation Element outlines the transportation system components required to serve the future needs of residents and visitors within the City of Goodyear and the surrounding planning area. This element uses a policy framework and Circulation Plan to depict and identify implementation measures to meet these needs.

This element, in conjunction with the Land Use Element, identifies and evaluates alternative transportation modes through a network of roadways - arterials, collectors, and residential streets. The existing major and arterial street network exhibits two distinct patterns within the planning area. North of the Gila River, the network reflects the one-mile grid system similar to that of the West Valley roadway system. The roadway network south of the Gila River deviates from the typical one-mile grid pattern to reflect the unique terrain of the Sierra Estrella Mountain foothills and other landforms.



The existing and proposed high capacity vehicular transportation corridors are primarily located in the northern half of the Goodyear Planning Area. I-10 extends east-west and SR 303 is sited on a north-south orientation. MC-85 generally parallels the Gila River and is located on its north side.

Current average daily traffic (ADT) volumes on I-10 through the planning area (i.e., 53,000 to 92,000) are approaching and slightly exceeding the 75 percent volume level predicted for 2020 (i.e., 115-162,000 ADT) in the existing Goodyear General Plan. Improvement plans identified in the Maricopa Association of Governments' (MAG) 2002 Long Range Transportation Plan Update call for widening I-10 to 8 lanes west to 83rd Avenue, and 6 lanes west to Dysart Road. Regional studies currently underway at MAG are considering additional capacity needs on all regional facilities and the arterial grid network.

Future improvements to SR 303 and MC-85 are currently in the planning stages. Proposed improvements to SR 303 north of Goodyear include crossing Grand Avenue and connecting with Interstate 17 (I-17). South of I-10, the Maricopa County Department of Transportation (MCDOT) has recently completed a Design Concept Report (DCR) for the section of SR 303 extending south from Indian School Road to MC-85. MCDOT is currently performing a corridor study for the southern segment (MC-85 to Riggs Road).

There are four Roads of Regional Significance (RRS) in the City of Goodyear as identified by MAG: Indian School Road, MC-85, Dysart Road, and Cotton Lane. These roads serve as the key high capacity arterial network with the primary function of providing mobility within the urban area. Approximately one mile to the west of the planning area, Jackrabbit Trail is also identified as an RRS.

With Goodyear's continued growth, traffic congestion is increasing. All of Goodyear's arterial roadways are, however currently functioning at acceptable levels of service (LOS). The City has synchronized its traffic signal system and utilizes leading/lagging left turns to enhance its traffic operations.

Alternative modes of transportation are important to both residents and visitors. Valley Metro route 131 extends into Goodyear and also provides connections between Estrella Mountain Community College in Avondale and Desert Sky Mall in Phoenix. Complimentary paratransit (required by the



Americans with Disabilities Act (ADA)) service is provided to patrons with disabilities who live within a $\frac{3}{4}$ mile radius of an existing route who cannot directly access it. Several bike lanes exist throughout the City, but are not connected to a regional network. The City requires that bike lanes be developed on all new and widened arterial and collector streets. In the future, additional bike-oriented amenities will be installed at bus transfer points and major activity centers.

Additional access to the Goodyear Planning Area at its northern and eastern boundaries may become a reality as a result of an increase in sales tax approved in Phoenix (2000) and Glendale (2001). As a result of this increased revenue, Phoenix plans to initiate Bus Rapid Transit (BRT) service west to the I-10/79th Avenue Park-and-Ride facility. Additional funding could result in westerly extensions to Goodyear at the future Park-and-Ride facility at I-10 and Litchfield Road. This service could assist in reducing the vehicular pressure that will continue to impact I-10.



3.2 Circulation Goals, Objectives and Policies

The goals, objectives, and policies presented in the Circulation Element serve as the City's guide to appropriately extend and provide vehicular, transit and non-motorized movement within and outside of the Goodyear Planning Area. The goals are the culmination of revalidated issues from the 1998 General Plan, input from the General Plan Advisory Committee (GPAC) and the residents of the City, Community Development Department staff, other City Department staff involvement, and URS's professional assessment. The Circulation goals respond to the following issues:

- To efficiently move vehicular traffic through the City
- To have a connected trails system that links activity nodes and residential areas
- To leverage the presence of the Phoenix-Goodyear Airport for increased aviation service and attaining economic development targets
- To move people into and out of the community using transit modes of travel

The supporting objectives and policies serve as guidelines for implementation activities, which will aid the City in reaching its desired vision.

GOAL A: A Well Functioning Roadway Network that Effectively and Efficiently Serves the City's Residents, Visitors, and Employment Sector.

Objective A-1: Continue to utilize a functional roadway classification system to provide mobility and access throughout the entire community.

Policy A-1a: The City shall cooperate with MAG, Arizona Department of Transportation (ADOT), Federal Highway Administration (FHWA) and MCDOT to implement the design and construction of access ramps on I-10 at its intersection with Bullard Road (full-access), Perryville Road (full-access), Sarival Road (east-bound access) and Citrus Road (west-bound access).

Policy A-1b: The City shall partner with MAG, ADOT, FHWA, and MCDOT to implement the design and construction of access ramps on SR 303 at its intersection with Camelback Road



(full-access), Indian School Road (full-access), Thomas Road (full-access), McDowell Road (north-bound access), Van Buren Street (south-bound access), Yuma Road (full-access), Elwood Street (north-bound access), and MC-85 (full-access).

Policy A-1c: The City shall collaborate with MAG, ADOT, FHWA, and MCDOT to ensure that a 300' to 350' right-of-way is preserved for the development of SR 303.

Policy A-1d: The City shall, for properties or existing master plans that currently have designated the need for a freeway(s) or high capacity road corridor (s) such as parkway(s), either identified upon their master plan or demonstrated through previous traffic studies, said property owners(s) must acquire, or provide resources for the City to acquire, necessary on-site and/or off-site rights-of-way for said roadway in the amount of right-of-way that is roughly proportional to their development's traffic on said roadway.

Policy A-1e: The City shall continue to utilize its adopted cross-sections for arterial, collector, and residential roadways.

Policy A-1f: The City shall continually monitor its roadway/intersection levels of service to implement lane additions, lighting improvements, and traffic control upgrading when warranted.

Policy A-1g: The City shall continue to utilize the roadway construction standards produced by the Maricopa Association of Governments (MAG).

Policy A-1h: The City shall utilize its Capital Improvement Plan to install illuminated street signage for traffic signals at the intersections of major/ arterial roadways.

Objective A-2: Effectively transport truck traffic through the City with minimal adverse impacts on residential and pedestrian areas.



Policy A-2a: The City will support and implement the 2001 City of Goodyear Truck Route Study phasing for both pre- and post-City Center implementation.

Policy A-2b: The City will install truck route signage to denote through and bypass truck routes in the City.

Policy A-2c: The City shall review the impact of truck routing on city-wide traffic mobility and the circulation element.

Objective A-3: Evaluate the need for enhanced vehicular mobility throughout the community.

Policy A-3a: The City shall consider the findings of the MAG Southwest Area Transportation Study and/or MCDOT Transportation Analyses to assist in determining the appropriate mix and location of freeways, parkways, and major arterials to serve its southern planning area.

Policy A-3b: The City shall support the expansion of existing and siting of future bridges over the Gila River to provide high vehicular capacity corridors that connect the central and southern regions of the planning area.

Policy A-3c: The City shall partner with the Cities of Phoenix, Buckeye and Avondale and other governmental agencies to establish a high capacity east-west corridor within ¼ mile north and/or south of the existing Broadway Road alignment from Dysart Road to Perryville Road.

Policy A-3d: The City shall continue to expand its regional approach to understanding and solving transportation issues.

GOAL B: A Community Linked Internally and Externally with Adequate Transit Service to Meet the Needs of Its Residents, Workforce, and Visitors.

Objective B-1: Continue to promote the potential of a commuter rail through the City.



Policy B-1a: The City shall continue to work with the START committee to identify and implement the Union Pacific/Southern Pacific railroad track as the commuter rail corridor to effectively serve the transportation needs of residents, employees and visitors between Southern California, the Palo Verde Nuclear Generating Station, Goodyear, and downtown Phoenix if identified in the MAG Regional Transportation Plan.

Policy B-1b: The City shall evaluate the potential of a commuter rail station north and east of the intersection of MC-85 and Estrella Parkway if identified in the MAG Regional Transportation Plan.

Policy B-1c: The City shall preserve rail corridors and evaluate other existing corridors for potential use for future rail transit or "Rails-to-Trails" recreation use.

Policy B-1d: The City shall ensure that the rail mode and bus transit will be fully incorporated as part of an integrated multi-modal transportation system.

Objective B-2: Continue to provide and extend transit system and facilities improvements in Goodyear.

Policy B-2a: The City shall seek to reduce its internally generated vehicle trips per day leaving/returning to the community by 20 percent per 10,000 residents over the next 10 years.

Policy B-2b: The City shall identify I-10, West Rio Salado (Broadway Road) and SR 303 as the preferred corridors to serve as bus rapid transit routes within and outside the City.

Policy B-2c: The City shall work with MAG and RPTA to identify and implement the conceptual locations of new Park-and-Ride transit facilities coordinated with new or extended transit routes.



Policy B-2d: The City shall continue to locate, design and implement bus bays along selected transit corridors (i.e., Van Buren Street) for patron access, shelter, and safety.

Policy B-2e: The City will continue to partner with Valley Metro to investigate and implement vanpools (i.e., Dial-A-Ride) for elderly and special needs residents to expand local fixed transportation routes.

Policy B-2f: The City will encourage carpooling and will coordinate with ADOT and MAG to promote the development of high occupancy vehicle lanes within freeway corridors.

Objective B-3: Evaluate the cost and public benefit of a community or sub-community-wide circulator (i.e., trolley or people mover) system.

Policy B-3a: The City shall conduct a survey to investigate the patron demand for a public/private rubber tire trolley system.

Policy B-3b: The City shall facilitate an evaluation study to examine the cost and benefits of a City operated trolley system serving the Phoenix-Goodyear Airport, City Center, Planned Regional Center and other proximate activity centers, if survey data suggests sufficient patron demand or interest.

Goal C: A Safe Network of Routes for Environmentally Responsive Modes of Travel.

Objective C-1: Evaluate the demand and cost for a Neighborhood Electric Vehicle (NEV) network throughout the City.

Policy C-1a: The City shall evaluate the arterial street network for reduced speed limits and the potential for on-street/off-street NEV lanes.

Policy C-1b: The City shall investigate its existing off-street path system for the compatible inclusion of NEV paths.



Policy C-1c: The City shall enhance the connectivity of residential, employment, and commercial areas.

Policy C-1d: The City shall expand the existing NEV study to examine the middle and southern regions of the City for linkages throughout the City, including the planned regional center location.

Goal D: A Non-Motorized Network that Links Neighborhoods with Community Activity Centers.

Objective D-1: Expand the identified regional bike system with additional linkages in Goodyear.

Policy D-1a: The City will implement bike lanes as identified by the adopted Parks, Trails, and Open Space Plan.

Policy D-1b: The City shall utilize irrigation canals and major overhead electric line easements for open space and possible recreational facility enhancements.

Policy D-1c: The City shall provide bike lanes for the safe operation of bicycles on all identified collector and arterial roadways when they are widened or newly built and, if possible, when they are repaved or reconstructed.

Objective D-2: Continue to establish an interconnected multi-use/equestrian trail system.

Policy D-2a: The City shall implement the multi-use and equestrian trail system as identified by the adopted Parks, Trails, and Open Space Plan.

Policy D-2b: The City shall continue to partner with the development community to design and implement trail improvements to link existing and proposed commercial, employment, educational, recreation, and open space facilities.



Policy D-2c: The City will continue to implement the Bullard Wash improvements to create a continuous trail from White Tank Regional Park to Estrella Mountain Regional Park.

Policy D-2d: The City shall continue to enhance the connectivity among the City Center, Employment Corridor and Bullard Wash.

Policy D-2e: The City shall work with Maricopa County to provide multiple, secure access points into Estrella Mountain Regional Park.

Objective D-3: Continue to promote a safe, walkable community.

Policy D-3a: The City shall continue to use the principles established through Crime Prevention Through Environmental Design (CPTED).

Policy D-3b: The City shall investigate locating park benches every quarter mile throughout major walking corridors in the City.

Policy D-3c: The City shall include design provisions to ensure that pathways and walkways are in accordance with the Americans with Disabilities Act (ADA).

Objective D-4: Ensure the connectivity of neighborhood, community, and regional paths.

Policy D-4a: The City shall review the conceptual trails corridors identified in adjacent communities, (i.e., Avondale, Buckeye, Litchfield Park, Maricopa County, and MAG) to promote a regionally accessible trail network in the West Valley.

Policy D-4b: The City shall support the integration of trails on both sides of the Gila River as a recreational component of the El Rio Watercourse Master Plan.



Policy D-4c: The City shall continue to partner with MAG and other participants to implement the West Valley Recreational Corridor along the Agua Fria River.

Goal E: A Functional and Economically Successful Airport and Luke Air Force Base.

Objective E-1: Preserve the long-term aviation use and adjacent employment opportunities of the Phoenix Goodyear Airport.

Policy E-1a: The City of Goodyear will continue to partner with the City of Phoenix to determine the operational and economic development potential of the airport.

Policy E-1b: The City of Goodyear will respect the noise contour lines established through past and updated aviation studies in siting appropriate adjacent and proximate land uses.

Objective E-2: Preserve the mission of Luke Air Force Base.

Policy E-2a: The City will continue to partner with Luke Air Force Base.

Policy E-2b: The City of Goodyear will continue to respect the Luke Air Force Base Clear Zones, Accident Potential Zones I and II, Southern Departure Corridor, Territory in the Vicinity of a Military Airport, and the 65 DNL or higher noise contours.

3.3 Circulation Plan

3.3.1 Roadways

Roadways are typically characterized by their operational and physical characteristics called functional classifications. The following standard classifications will be used for vehicular roadways in the Goodyear Planning Area. Typical cross section details for these classifications are shown in the Appendix of this document.

- **Freeway/Expressway:** A Freeway is a fully access controlled facility designed to move high volumes of traffic over substantial distances. A freeway could be designed as an at-grade or below/above grade facility. Urban freeways typically utilize four to eight through lanes and can typically transport between 160,000 and 200,000 vehicles per day. I-10 is an example of a freeway.
- **Parkway:** A Parkway is also designed to move high volumes of traffic over substantial distances. It is typically designed to be an at-grade facility with substantial right-of-way for building setbacks and landscaping. A parkway may also be grade separated from major intersecting streets. Parkways utilize four to six through lanes with a landscaped raised median and can typically transport up to 85,000 vehicles per day. The proposed west Rio Salad Parkway (Broadway Road Corridor) is an example of a parkway.
- **Scenic Arterial:** A Scenic Arterial is designed to not only transport vehicular traffic through the City, but also to act as the City Center loop gateway for residents, employees, and visitors. A scenic arterial is an at-grade roadway comprised of four to six lanes, two bike lanes, two grade separated sidewalks and a raised landscaped median. The roadway uses landscaped medians and tracts with adjacent building/landscape setbacks to create an inviting environment. The City's adopted standard for the roadway uses a 150-foot cross-section. Yuma Road is an example of a Scenic Arterial.
- **City Center Arterial:** The City Center Arterial is designed to continue the scenic theme on the Yuma Road and Estrella Parkway segments within the Goodyear Boulevard loop road. The City Center Arterial is

an at-grade roadway with four lanes, two grade separated sidewalks and a median. The roadway uses a generous median and adjacent landscape tracts to buffer adjacent land uses. If the center raised median were removed, the roadway could ultimately support six lanes of traffic. The City's adopted standard for the roadway also uses a 150 foot cross section. Goodyear Boulevard is the only roadway designated as a City Center Arterial.

- **Major Arterial:** A Major Arterial is designed for vehicular mobility over moderate trip lengths. A major arterial is an at-grade roadway comprised of six lanes, two bike lanes and two grade separated sidewalks, a raised median and landscape tracts. The City's adopted standard for the roadway uses a 130-foot cross-section. Litchfield Road is an example of a Major Arterial roadway.
- **Arterial:** An Arterial is designed for vehicular mobility over moderate trip lengths. An arterial is an at-grade roadway comprised of four lanes, two bike lanes and two grade separated sidewalks, a raised median and landscape tracts. The City's adopted standard for the roadway uses a 110-foot cross-section. Citrus Road is an example of an Arterial roadway.
- **Major Collector:** A Major Collector carries lower volumes of through traffic for shorter distances while providing direct access to adjacent residences and commercial activities. The Major Collector roadway is comprised of four lanes, two bike lanes, a raised median, and two grade separated sidewalks. The City's adopted standard for the roadway uses an 80-foot cross-section. Robson Circle is an example of a Major Collector roadway.
- **Minor Collector:** A Minor Collector also carries limited through traffic and provides property access, but with lower traffic volumes than a Major Collector. Minor Collectors are typically shorter than Major Collectors and have a reduced role in the overall roadway system. The Minor Collector Roadway is comprised of two lanes, bike lanes, an at-grade median, and grade separated sidewalks. The City's adopted standard for the roadway uses a 60-foot cross-section. San Miguel Drive is an example of a Minor Collector roadway.

- Residential Street:** Residential Streets provide direct access to local property and are not designed to accommodate through traffic. The Residential Street is comprised of two lanes and either attached or detached sidewalks. The City's adopted standard for the roadway uses a 50-foot cross-section. Santa Alberta Lane is an example of a Residential Street.

Figure 3-1, *Roadway Functional Classification Plan*, illustrates the planned functional classification system within the Goodyear Planning Area for the high capacity network. The roadways shown on Figure 3-4 have a total length of over 185 miles and utilize nearly 3,400 acres of right-of-way as shown in Table 3.1, *Planning Area High Capacity Roadway Composition*. The major and arterial roadways comprise nearly 75 percent of the network, while the freeway/parkway designation comprises the majority of the right-of-way among the roadway types. Roadways shown without identified classifications include collector and residential streets. Figure 3-1 includes new roadways and extensions, and upgrades to the existing vehicular network.

Table 3.1
Planning Area High Capacity Roadway Composition

Roadway Type	Length		Acreage	
	Miles	Percent	Amount	Percent
Freeway/Parkway	29.0	16	1,055	31
Scenic Arterial	25.5	14	464	14
City Center Arterial	1.0	<1	18	<1
Major Arterial	54.3	29	856	25
Arterial	75.3	41	1,004	30
Total	185.1	100	3,396	100

Source: URS, October 2002

The land use plan has been used as input for regional transportation modeling conducted by MAC. The results of the model have been used to determine the appropriate facility type and number of lanes within the community.

Figure 3-1 Roadway Functional Classification Plan

3.3.2 Rail and Transit

The City of Goodyear is a very linear community in terms of its incorporated boundary, and is generally 22 miles long and approximately 7 miles wide. The shape of the community, and the impediments of the Gila River and Estrella Mountains makes a strong case for the incorporation of transit as a significant future travel mode. The inclusion of the City Center, designation of Village Centers at primary activity nodes, and the addition of High Intensity Mixed Use Corridors in the City will provide an enhanced market of adjacent ridership patrons who use transit and other alternative modes of transportation.

Commuter rail could also be a viable option in the future, using the existing Union Pacific/Southern Pacific line located on the north side of MC-85. The line could connect downtown Phoenix and the Phoenix-Goodyear Airport. Future increases of the airport's employment base could enhance the potential for a proximate commuter rail station, reducing the dependence on I-10 as the regional vehicular mobility conduit for the West Valley.

Light rail is currently planned on initial segments in Phoenix and Glendale. The intent of the City is to leverage the regional continuity of McDowell Road and incorporate light rail to enhance east-west mobility and capture several large activity centers along the corridor (i.e., Perryville Prison and the future planned regional center). Station stops are anticipated for the following locations (conceptual only) along McDowell Road:

- Intersection of Dysart Road
- Intersection of Litchfield Road
- Intersection of 151st Avenue
- Intersection of Citrus Road

A potential north-south light rail corridor has been identified for Estrella Parkway/PebbleCreek Parkway based on its extensive continuity through the planning area and centralized location. Estrella Parkway offers the adjacency of light rail or fixed guideway transit patrons from PebbleCreek, the future regional center, the City Center, El Rio, and Estrella Mountain Ranch. Station stops are anticipated for the following locations (conceptual only) along Estrella Parkway:

- Intersection of Clubhouse Drive
- Intersection of Encanto Boulevard
- Intersection of Yuma Boulevard
- Intersection of MC-85
- Intersection of the Roeser Road alignment
- Intersection ¼ mile south of Beloit Road (potential Resort Development)
- Intersection of Elliot Road

Bus rapid transit (BRT) also plays a role in the multi-modal network within the City. It is envisioned that the I-10 freeway will provide a direct link to the 79th Avenue Park-and-Ride facility. In addition, the future SR 303 could also enhance north-south BRT service within the planning area. The addition of park-and-ride facilities will provide convenient access points within the planning area for BRT patrons. Conceptual locations for these lots include the following:

- Proximate to the northwest corner of Dysart Road and Van Buren Street
- Proximate to the northeast corner of I-10 and Litchfield Road
- Proximate to the northeast corner of PebbleCreek Parkway and McDowell Road
- Proximate to the southeast corner of I-10 and SR 303
- Proximate to the northeast corner of MC-85 and SR 303

Figure 3-2, *Transit and Rail Service Plan*, illustrates potential commuter, light rail and bus rapid transit service facilities and locations that are located within the Goodyear Planning Area.

**Figure 3-2
Transit and Rail Service Plan**

3.4 Non-Motorized Circulation

Non-motorized circulation is an important component in promoting the movement of people within the Goodyear Planning Area. Non-motorized circulation can include either trip-oriented or recreational travel and includes pedestrian, bicycle and equestrian modes. The non-motorized circulation system is shown on Figure 3-3, *Non-Motorized Circulation Plan* and Figure 3-4, *Trail System Standards*.

The City of Goodyear prepared and adopted its Parks, Trails, and Open Space Master Plan in 2001. Trails are linear trail connections developed for a variety of modes of recreational travel such as hiking, biking, boarding, skating, and horseback riding. Trails provide a non-motorized link between residential areas, other park and open spaces, and activity nodes. Trails may be located within their own right-of-way or along canal banks, utility easements, street right-of-ways, or flood control facilities. The trails component of the master plan identifies recommendations for the conceptual location of multi-use equestrian (MUE) and multi-use (MU) trails as defined below:

- **Multi-Use Equestrian Trails** are intended to accommodate equestrian users and other users. Bicycle users should be accommodated on paved lanes, separate from equestrian users. However, some bicycle users (i.e., mountain bikes) are suitable for use on (and may prefer) MUE trails. These trails are recreational facilities typically placed along natural environment corridors appropriate for such uses rather than adjacent to roadways. Examples of such corridors are river courses, canal banks, and utility easements. Wherever practical and financially feasible, grade separation for crossings of major roadways should be sought, as horses and motor vehicles do not mix well.
- **Multi-Use Trails** are not intended for equestrian use. There may be some potential to use Neighborhood Electric Vehicles (NEV's) along some of the trail alignments such as Bullard Wash; however, it is essential to provide adequate separation from non-motorized traffic. Multi-use trails have their own alignment (i.e., are not part of a roadway), for two-way travel and are typically constructed at a minimum width of 8 feet. In higher use locations those pathways should be at least 12 feet wide. Multi-use trails can be either paved or unpaved. In urbanized locations, trails are usually paved; in more rural

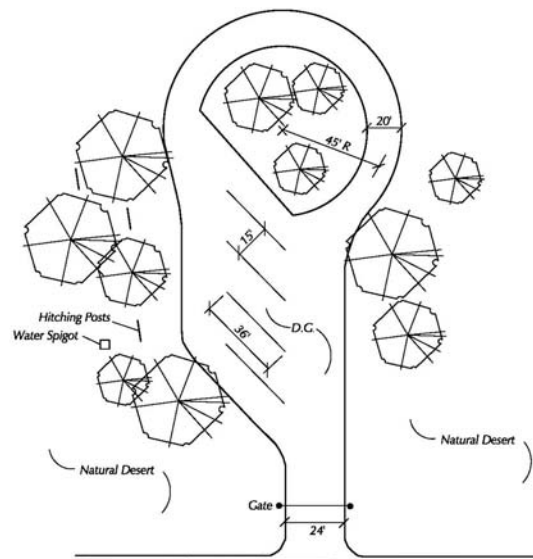
or natural locations (such as along rivers, streams and on canal banks), they can be unpaved with a graded compacted surface. In high use areas, paved pathways can be signed and striped to provide guidance for preferred use by pedestrians and bicyclists.

- **Multi-Use & Multi-Use Equestrian Trails** are projected to ultimately have fully separated paths, but may initially function as a combined unpaved trail. The City will determine the timing for and implementation of separation of the two systems based on the phasing of surrounding area development and population growth. Heavy bicycle traffic is not compatible with equestrian use.
- **Bikelanes** are located along the edges of the paved roadway outside the travel lanes and are identified by pavement markings and signs. Each lane serves one direction of travel. Bicyclists usually have exclusive use of a bike lane for longitudinal travel. Special bike lane striping and signing treatments are used at intersections to improve guidance and minimize conflicts with motor vehicles as recommended by the American Association of Highway Transportation Officials (AASHTO).

**Figure 3-3
Non-Motorized Circulation Plan**

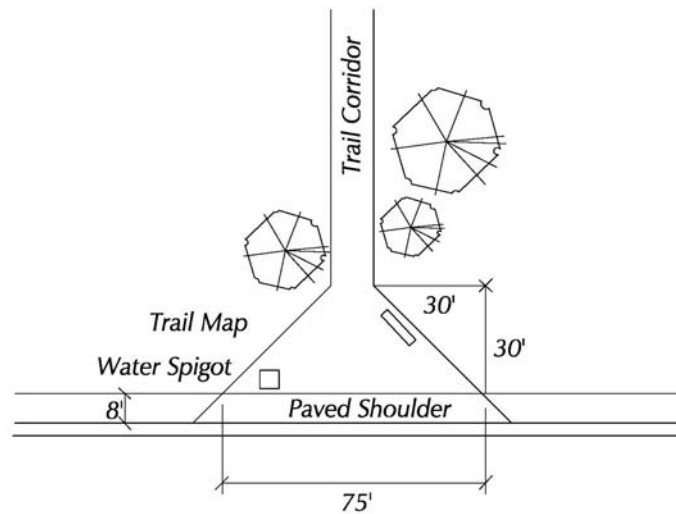
The diagram illustrates a cross-section of a trail. At the top, two trees are shown with the text "Landscaped Areas" and lines pointing to them. Below the trees, a horizontal line represents the ground surface. Underneath this line, a rectangular box represents the trail structure. Inside the box, the text "10' Clear" is written. Below the "10' Clear" text, there are two small figures of people walking. The box is divided into sections with dimensions: "3'" on the left, "8' Trail Surface-Urban" in the center, and "3'" on the right. Below the box, the text "15' - Urban" is written, and below that, "25' - Rural" is written.

Minimum Trail Clearances



Major Trail Head

Figure 3-4
Trail System Standards (continued)



Hiking Trail Head

3.5 Circulation Element Implementation Activities

The Circulation Element Implementation Activities identify both short- and long-term projects that will achieve the goals and objectives identified previously. A listing of these activities is provided below and organized into near (1-5 year) and long-term (5-10 year) timeframes to support the 10-year update timeframe mandated by Arizona Revised Statutes (ARS). The activities identified for near-term implementation are further defined in Chapter 12.0, *Implementation Program*.

Near-Term Implementation Activities	Long-Term Implementation Activities
Major Intersection Lighted Signage and Landscaping Enhancement	Commuter Rail Corridor and Facilities Feasibility Study
Park-and-Ride Lot Site Location Study	Light Rail Corridor and Facilities Feasibility Study
Freeway Access Ramp Improvements and Landscaping/Public Art	